IE-SOAR™ 2.4kW

A fuel cell power module that directly replaces a battery and gives much longer flight times.

Enable previously impossible applications – your business is no longer constrained by flight time.

Unlock BVLOS operations – BVLOS makes sense with the range provided by fuel cells.

Increase operational efficiency – spend more time in the air and achieve more.

Technical benefits

Designed for safety and reliability. Single point failure tolerant and built in power system redundancy.

Modular – combine systems in parallel for 2.4kW, 4.8kW outputs.

Direct battery replacement – 12S to 16S compatible. Automatically follows load demand just like a battery.

CE and FCC certified.

1000 hour commercial warranty.

Fuel cells vs. batteries

• Increased flight time
• Fast refueling
• Built in power system redundancy

Fuel cells vs. internal combustion engines

• Clean & zero-emission
• Near silent operation
• Reduced maintenance. No moving parts. No tuning.
• Vibration free for maximum stability

Maximum continuous power			2400W
Peak power			Up to 8000W
Output voltage (DCDC regulated)			Configurable between 50V and 70V
Fuel Cell Power Module (FCPM)	Dimensions		128 × 442 × 233mm
	Mass		4400g
Hydrogen Regulator	Mass		315g
	Maximum regulator (cylinder) pressure		350 bar/5000 psi
	Output pressure		0.9 bar.g ± 0.1 bar.g / 13 psig ± 1.5 psig
	Maximum cylinder mass		10kg
Default Hybrid batteries (Configurable for higher or longer peak power)	Configuration		2 × 6S in series
	Dimensions (per battery)		135 × 40 × 40mm
	Mass (per battery)		535g
	Capacity (per battery)		3300mAh
	Peak power		4800W
Environmental operating conditions	Startup temperature		5℃ to 40℃
	Operating temperature		-5℃ to 40℃
	Maximum altitude*		5000m
	Storage temperature		-10℃ to 70℃
	System warranty		1000 hours
Safety features	Dual redundant power system and backup battery		
	Certification of IE-SOAR™ 2.4kW		CE and FCC
Other features	Internal data storage for firmware update, performance and diagnostics		SD card
	Communication protocol to UAV or accessories		UART / CAN
	Output electrical connector		Ring Terminal / AS150
Example Integration	**UAV**	**Gryphon HX-1600**	**Gryphon XQ-1400 VS**
	Flight time (no payload)	120 minutes	120 minutes
	Flight time (max. payload)	80 minutes (5.2kg payload)	60 minutes (4.5kg payload)

*   It may be possible to widen this range depending on customer power requirements.

For more information about our products visit our website: **www.intelligent-energy.com**

To find out how you could benefit from longer flight times, arrange a meeting with
a sales representative in your region by emailing: **sales@intelligent-energy.com**

+44 (0) 1509 271 271
sales@intelligent-energy.com
intelligent-energy.com